

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Karin Williams on 7/18/08.

The application has been amended as follows:

Claims **1-6**. (Canceled).

7. (Currently Amended) A security system using a cylindrical prism, comprising:

- a plane beam generator using a hollow cylindrical prism with a predetermined diameter;
- a signal detector (1240) located [having] a predetermined distance from the plane beam generator and detects a plane beam generated by the plane beam generator;

- a central processing unit (1260) for judging whether there is an intrusion from a signal detected by the signal detector; and

- an output unit (1270) for outputting the judgment result of the central processing unit.

8. (Currently Amended) A security system using a cylindrical prism, comprising:

- a plane beam generator using a hollow cylindrical prism with a predetermined diameter;
- a reflector (1230) for reflecting a plane beam generated by the plane beam generator;
- a signal detector (1240) for detecting a beam reflected from the reflector;
- a central processing unit (1260) for judging whether there is an intrusion from a signal detected by the signal detector; and

an output unit (1270) for outputting the judgment result of the central processing unit.

9. (Currently Amended) A security system in which a plurality of security systems are respectively arranged on a plurality of planes to detect intrusions for the plurality of planes, wherein each of the plurality of security systems comprises:

a plane beam generator using a hollow cylindrical prism with a predetermined diameter;

a reflector (1230) for reflecting a plane beam generated by the plane beam generator;

a signal detector (1240) for detecting a beam reflected from the reflector;

a central processing unit (1260) for judging whether there is an intrusion from a signal detected by the signal detector; and

an output unit (1270) for outputting the judgment result of the central processing unit.

11. (Currently Amended) A security system using a cylindrical prism, comprising:

a plane beam generating apparatus using a hollow cylindrical prism having a predetermined diameter; and

light-receiving elements for receiving a plane beam generated by the plane beam generating apparatus, the light-receiving elements are arranged in a row at one side such that they can receive the plane beam,

wherein intersecting points of the light-receiving elements and boundary lines (1301, 1302, 1303 and 1304) generated when an intruder (1300) blocks the plane beam are obtained, equations of the boundary lines are obtained from the position of the plane beam generating apparatus and the intersecting points, and positions (P1, P2, P3 and P4) at which the intruder meets the boundary lines are determined to obtain information about the intruder.

12. (Currently Amended) The security system as claimed in claim 11, wherein the security

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system employs two plane beam generating apparatuses, the equations of the four boundary lines are as follows

$$[<PSTYLELSPACE=130>] \quad (a) \quad y - d = \frac{d}{c - L_1} (x - c) \quad [(a) <PSTYLELSPACE=130>]$$

$$[>] \quad (b) \quad y - d = \frac{d}{c - L_2} (x - c) \quad [(b) <PSTYLELSPACE=130>] \quad (c) \quad y - b = \frac{b}{a - M_1} (x -$$

a) \quad [(c)]

$$[<PSTYLELSPACE=130>] \quad (d) \quad y - b = \frac{b}{a - M_2} (x - a) \quad [(d)]$$

(here, x is a definite straight line on which the light-receiving elements are arranged, y is an imaginary straight line perpendicular to the line x, (a, b) means x and y coordinates of one of the plane beam generating apparatuses, (c, d) means x and y coordinates of the other plane beam generating apparatus, L1 and L2 are intersecting points of boundary lines generated from one of the plane beam generating apparatuses and the line x, and M1 and M2 are intersecting points of boundary lines generated from one of the plane beam generating apparatuses and the line x), and the positions at which the intruder meets the boundary lines are determined from the equations (a), (b), (c) and (d) to obtain the information about the intruder.

Claims 14-16 (Canceled).

2. The following is an examiner's statement of reasons for allowance:

In a security system for monitoring intruder using optical beam generation and beam detector, the claimed use of a hollow cylindrical prism (see illustrations on Figs 2-5) having a predetermined diameter to generate a plane beam for reception by the beam signal detector and for the processor to judge whether there is an intruder from a signal detected by the signal detector in the manner claimed, is not taught or suggested in the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (571) 272-2963. The examiner can normally be reached on Mon -Thu 9:00Am-5:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin C. Lee/
Primary Examiner, Art Unit 2612